

**REMARKS**

By this amendment, claims 1-32 are pending, in which claims 1, 4, 8, 9, 16-23, and 25-30 are currently amended, and no claims are canceled, withdrawn from consideration, or newly presented. No new matter is introduced.

The Office Action mailed May 19, 2004 rejected claim 4 under 35 U.S.C. § 112, second paragraph, claims 1, 6-7, 9, 14-15, 17-20, and 22-23 under 35 U.S.C. § 103(a) as obvious over *Ji et al.* (U.S. 5,623,600) in view of *Shanklin et al.* (U.S. 6,578,147), claims 2-4, 10-12, and 24-30 under 35 U.S.C. § 103(a) as obvious over *Ji et al.* in view of *Shanklin et al.* and further in view of *Wells* (U.S. 6,338,141), claims 5, 13, 21, and 31-32 under 35 U.S.C. § 103(a) as obvious over *Ji et al.* in view of *Shanklin et al.* and further in view of *Xu* (U.S. Patent Application Publication No. 2002/0032766), and claims 8 and 16 under 35 U.S.C. § 103(a) as obvious over *Ji et al.* in view of *Shanklin et al.* and further in view of *Wells* and *Xu*.

Claim 4 has been amended to recite “the detection management system,” and thus the rejection under 35 U.S.C. § 112 should be withdrawn. (*See*, e.g., specification, page 4, lines 21-27)

Applicants respectfully traverse the rejections under 35 U.S.C. § 103, in that none of *Ji et al.*, *Shanklin et al.*, *Xu*, nor *Wells*, singly or in combination, discloses the claimed features particularly as now amended.

For example, amended independent claims 1, 8, 9, and 16 each includes the feature “**distributing a common copy of the flow** to each of the scanning computer systems in parallel.” Amended independent claims 17, 18, and 19 each recite “**duplicating the flow** to produce a plurality of **common copies** of the flow.” Amended independent claims 20 and 21 each recite “receiving **respective common copies of a flow of content** from the front-end

processor in parallel.” Amended independent claims 22, 25, and 28 each include the feature “receiving an alarm ... when **a common flow of content scanned by the scanning computer systems in parallel** contains malicious code, said common flow including at least one of a hypertext markup file and a transferred file.” The Office Action acknowledges that *Ji et al.* fails to teach these features, and relies on *Shanklin et al.* (Office Action, Page 3, line 20 - Page 4, line 13)

In stark contrast, *Shanklin et al.* (col. 2: 59 - col. 3: 3; col. 5: 21-28; col. 5: 56-62) discloses sending **different packets or sessions** to each of multiple processors for **processing different packets or sessions in parallel**. In its discussion of the embodiment of FIG. 2, *Shanklin et al.* states, “Thus, each sensor handles one-third of the sessions in a given datastream.” (col. 5: 27-28) Further, in its discussion of the embodiment of FIG. 3, *Shanklin et al.* states, “Even in this situation, each sensor 31 processes only one-third of the packets.” (col. 5: 67 - col. 6: 1) Additionally, *Shanklin et al.* states, “Specifically, a ‘copy to’ operation is used to send each packet to **the appropriate sensor as well as to the destination in local network 10 to which the packet is addressed.**” (col. 6: 39-41) Thus, *Shanklin et al.* fails to suggest or disclose these features. Thus, Applicants respectfully submit that no reasonable combination of *Ji et al.* and *Shanklin et al.* suggests or discloses “**distributing a common copy of the flow** to each of the scanning computer systems in parallel.”

With respect to dependent claims 2-4 and 10-12, the Office Action, in its “Response to Amendment” section on page 11, lines 4-9, acknowledges that the “Wells reference is used to fill in the gap for the limitation ‘a database containing rules configured for creating a signature of a piece of malicious code detected by at least one of the scanning computer system’, and updating the detection system by the detection manager recited in claims 2-4, 10-12,” and thus that *Wells*

also does not disclose or suggest the features absent from the combination of *Ji et al.* and *Shanklin et al.*

Regarding the rejection of claims 5, 13, 21, and 31-32, the Office Action correctly acknowledges, “Modified Ji-Shanklin fails to teach scanning computer systems configured to execute respective anti-virus scanning software having different, corresponding coverage of malicious code,” and thus relies on *Xu*, stating, “It would have been obvious to one of ordinary skill in the art to modify the modified Ji-Shanklin’s parallel sensors to incorporate virus scanning software differ [sic] in their capabilities be used [sic] as a “safety net” to improve the chances of detecting a virus, see page 18, paragraphs 228 (Xu).” (Office Action, Page 7-8)

However, even if one skilled in the art would have been motivated to combine *Ji et al.* and *Shanklin et al.*, any “modified Ji-Shanklin parallel sensors” would be unsuitable for incorporating the virus scanning software of *Xu*. As discussed previously, *Shanklin et al.* sends **different packets** to each of multiple processors, with each processor configured to perform processing that is identical to each other processor, but **processing different packets in parallel**, and each of the sensors receives sessions or packets (depending on the embodiment as shown in *Shanklin et al.*) that are **different from the sessions or packets received by the other sensors**. *Xu* states, at page 18, ¶ 228:

In FIG. 23, the ISP network 2390 includes a packeting engine 2300 between clients 2321-2323 and the network service providers 2381-2383 coupled to the Internet 2385. The packeting engine 2300 directs the client packets through a series of appliances, including an intrusion detection system 2351 one or more virus scanning devices 2352-2353, and one or more of firewalls 2361-2363. **Since companies that create virus scanning software differ in their capabilities to detect viruses** and to issue timely virus signature updates, multiple virus scanning devices may be used as a “safety net” to improve the chances of detecting a virus.

Thus, each of the virus scanning devices 2352-2353 performs processing that is different from the other device, with **each device processing the same content as the other device** to

“improve the chances of detecting a virus.” Thus, if packets or sessions were sent to device 2352 that are different from the packets or sessions sent to device 2353 of *Xu*, the result would yield only partially processed portions of the content, with one portion receiving one type of processing, and a different portion receiving a different type of processing (i.e., each portion only receiving a single type of virus detection processing), which is contrary to *Xu*’s stated purpose for using the devices 2352-2353. Therefore, one skilled in the art would have no motivation to combine *Xu* with any “modified Ji-Shanklin parallel sensors.” If a proposed modification would render the prior art being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Obviousness rejections require some evidence in the prior art of a teaching, motivation, or suggestion to combine and modify the prior art references. *See, e.g., McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001); *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Thus, the obviousness rejection of claims 5, 13, 21, and 31-32 should be withdrawn.

Accordingly, the rejection of dependent claims 2-7, 10-15, 23-24, 26-27, and 29-32 should be withdrawn for at least the same reasons as those discussed above with regard to their respective independent claims, and these claims are separately patentable on their own merits.

Applicants further respectfully submit that many claims are rejected improperly throughout the Office Action. For example, regarding the rejection of at least claim 8, the Office Action improperly gives no reasons why the applied references suggest at least claim 8 or 16, e.g., at Page 8, line 10, asserting, “Claim 8 is an apparatus corresponding to method claims 1-7.” The Office Action apparently relies on various combinations of words recited in the claims to

assemble a rejection based on the occurrences of those words in other claims, for example, “see the statement of rejections of claims 2-3 above” at Page 8, lines 14-15; “see the statement of rejections of claims 1 and 5 above” at Page 8, lines 19-20; “see the statement of rejections of claims 1 and 6 above” at Page 9, lines 3-4; “see the statement of rejections of claims 1 and 2 above” at Page 9, lines 8-9; “see the statement of rejections of claims 1, 4 and 7 above” at Page 9, line 15. The Office Action, at Page 9, lines 16-17, then states, “Claim 8 is rejected for the same reasons provided in the rejections of claims 1-7 above.” Furthermore, the Office Action, at Page 9, lines 18-20, then states, “(Amended) claim 16 is a method claim reciting limitations (broader in scope) of apparatus claim 8. Claim 16 is rejected for the same reasons provided in the statement of rejections of claims 8 and 1-7 above.” There is no explanation proffered as to how or why any of the applied references, either singly or in combination, apply to claim 8 or claim 16 specifically, other than a combination of recitations of “see the statement of rejections” for various combinations of claims that were rejected on different grounds (e.g., claims “1 and 5”, claims “1 and 2”).

Similarly, the rejections at least of claim 20 (rejected by stating, “an apparatus claim reciting limitations of claims 1 and 6” (Office Action, Page 5)) and claims 22-23 (rejected by stating, “Apparatuses implementing features of claims 1, 6 and 7” (Office Action, Page 5)) are improper. As clearly stated by the MPEP § 2141.02, “Ascertaining the differences between the prior art and the claims at issue requires interpreting the claim language, and considering both the invention and the prior art references as a whole.” Further, “In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983)”

The Patent Office must give specific reasons why one of ordinary skill in the art would have been motivated to combine the references. *See, e.g., In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998). Moreover, Applicants respectfully submit that the reasoning that the Examiner puts forth for the rejection with respect to at least claims 8 and 16 contravenes 35 U.S.C. § 132, which requires the Director to “notify the applicant thereof, stating the reasons for such rejection.” This section is violated if the rejection “is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.” *Chester v. Miller*, 15 USPQ2d 1333 (Fed. Cir. 1990). This policy is captured in the Manual of Patent Examining Procedure. For example, MPEP § 706 states that “[t]he goal of examination is to clearly articulate any rejection early in the prosecution process so that applicant has the opportunity to provide evidence of patentability and otherwise respond completely at the earliest opportunity.” Furthermore, MPEP § 706.02(j) indicates that: “[i]t is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to respond.” Therefore, if a next action maintains these rejections, Applicants respectfully request that the next action be made non-final to give the Applicants a fair opportunity to respond.

Finally, in response to the Office Action’s “Response to Amendment” section on Page 10, lines 18-19, Applicants respectfully submit that a mere statement that “each sensor of *Shanklin et al.* is identical to the other sensors” is not necessarily an assertion by Applicants that “different sensors” is or is not claimed in claims 1 or 9.

Therefore, the present application, as amended, overcomes the objections and rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 703-425-6499 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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Date

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